Attachment 1 to Amendment 0001 to MCC-15-RFQ-0058

Reference	Question	Answers
C.4	"Output specification." The LiDAR points density asked is "1 point every 1.5cm" shall read: "1.5 **meter** and not "centimer"	This element shall read: "The LiDAR data shall be acquired at 0.5-meter nominal pulse spacing (NPS)""
Page 2	With reference to page 2 of the RFQ, the format is stipulated in subpart 12.6 and subpart 13.5. Could you please elaborate and/or provide the formats?	This is a Federal Acquisition Regulations (FAR) cite which determines the acquisition process that we follow.
Page 22	Electronic Copy Submission - L.2.2 Please clarify if our submission is required to be a word document format or as per industry standard in a PDF Format?	PDF is fine
General	Can the Area of Interest (AOI) for the four required sectors (Dosso-Gaya Irrigation, Rural Access Road, RN7 Road, and RN 35), depicted as Figures 1-3, be supplied as shape files, KML files, or other digital file format? This allows for proper pricing and eliminates guesswork/mistakes as to actual coverage desired.	See Attachment 2
General	Concerning the three road sector requirements; without a provided AOI boundary file (as noted in question #1 above), what defines a village crossed by the road. Furthermore, how would the village extent be identified and demarcated for pricing purposes?	DELETE "as well as villages crossed by the road" ON C.4.2.4; C.4.3.3; C.4.4.3
General	Do you interpret altimetric precision to mean vertical accuracy. Please verify	Clarification: "The altimetric precision shall be 10 centimeter" TO "The LiDAR vertical accuracy shall not exceed 10 cm RMSE"
General	In this context does horizontal precision mean horizontal accuracy	Clarification: The horizontal precision relative to the DTM shall be at least 30 centimeters;" TO READ "The LiDAR horizontal accuracy shall be at least 30 centimeters relative to the DTM"
General	1. Concerning orthorectified imagery; Only spatial resolution and file format are noted in the solicitation. There are many missing parameters that will need to be known, which include;	See Blocks Below (a through g)
	a. Spectral Resolution (e.g. RGB, RGB/NIR)	RGB/NIR
	b. Radiometric Resolution (e.g. 8-bit, 12-bit)	11-BIT
	c. Acceptable Collection/Environmental/Vegetation/Topographic conditions (e.g. sun angle, clouds, haze, flooding, building lean, leaf-on/off)	Leaf-on or leaf-off acceptable. Aerial photography shall be undertaken only when well-defined images can be obtained. Photography shall not be undertaken when the ground is obscured by haze, flooding conditionson more than 20% of the total studied area, or when clouds, cloud shadows, atmospheric dust and smoke by more 5% would appear on more than five percent (5%) of the area of any one photograph. No more than 25˚ from Nadir with a total Field of View of 50. Less than 30 degre sun angle so the flight should be planned across middle of the day.
	d. Geographic Extent and Image Coverage (e.g. exterior buffer size, partial tile handling, non-image data)	The DPA (Defined Project Area) shall be buffered by a minimum of 100m to create a buffered project area (BPA). Data collection is required for the full extend of the DPA.
	e. Acceptable Imagery Correction/Imagery Mosaicking conditions (e.g. color balancing, seamlines, smears, edgematching, radial displacement)	Edgematching
	f. Desired tile size and file naming (can be proposed if unknown)	2km or propose tile size for efficient use. Propose file naming
	g. Metadata Requirements - Federal Geographic data Committee (FGDC) Standards	Standard metadata files
General	8. Concerning classification of LiDAR points into standard categories; there are missing parameters that will need to be known, which include;	See Blocks Below (h through j)
	h. Reference to a standard guideline which states the level of confidence to be met. We recommend stating "Classification accuracy shall be appropriately classified at 95% confidence level".	ADD "Classification accuracy shall be appropriately classified at 95% confidence level"
	i. For classification of points into "buildings/structure" and "water" categories, appropriate size specifications are needed. (Pending to answer c. below)	**2m² minimum**
General	j. Should the LiDAR classification be limited to bare earth and non-ground categories only. Classification such as buildings and vegetation are detailed labor intensive and may exceed the actual need of the data.	We need classification for lidar data which should include building and vegetation
	9. Concerning the DTM requirement; there are missing parameters and guidelines that will need to be known, which include;	See Block Below (k)
	k. Are you requiring a DTM deliverable or DEM deliverable?	We require both DTM and DEM. Supplemental breaklines shall be generated along all defined water bodies and road edges (where required) to support the DEM generation
General	1. Both "horizontal precision" and "altimetric precision" are listed as specifications to be met. Are these specifications intended for both the LiDAR and orthoimagery data?	ADD "the horizontal accuracy for the orthoimagery shall not exceed 60 cm RMSE"
General	Concerning the statement "All deliverables shall be in the coordinate system UTM zone 31 WGS84; The geoid model has not been specified.	Add "The geoid model shall be the Earth Gravitational Model 2008 (EGM08)"
C.4.1.11	Concerning statement C.4.1.11 (page 7); We are not accustom to some of the words used (e.g. "seedlings", "lightened points", "nick lines", and so forth) and need additional clarification on the purpose and desired outcome of the statement. We think the overall intent is to reduce the number of ground points through Model Key Point filtering, so modeling software may run more efficiently.	That is correct, the intent is that the final model could be used easily with a standard workstation computer. Use breakline instead of nick lines.